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# The Central Improvement Team

Fitting an old organization with a new operating system is a risky procedure. Careers rise and fall based on what happens during the transition. Organizations that are successful will feel heroic; failure can undermine the confidence of an entire health system. Leaders whom I have met on the cusp of a transition all want to know the same thing: how can I make sure this will work?

My answer is to make a strong, succinct case for change that is easy for everyone to understand. Make sure your message is focused on the patient. Educate yourself and all your top executives in lean thinking. And then reshape the career expectations of managers and executives around continuous improvement. Lean healthcare organizations do this with a centralized improvement team that usually reports to the CEO.

The central improvement team is called by many names—lean promotion office, performance improvement team, etc.—but it should always be the repository of lean expertise and a path for promotion. The systems that I believe are most effective feature two-year rotations through the central improvement team for people who are seen as

leaders with potential. Team members get trained in lean skills and then lead or assist in improvement projects throughout the organization. This way, every leader eventually has a solid background in lean thinking and has worked throughout the organization. Also, acquiring lean skills becomes part of a promotion instead of a burden or an academic exercise.

Think of the improvement team as the bloodstream of an organization. People move through the team acquiring knowledge the way that blood acquires oxygen. These new lean thinkers are then spread through the organization and bring a specific kind of energy to the front line.

So the purpose of this team is threefold: to facilitate lean activities while teaching lean concepts and to develop the health system's future leaders. At ThedaCare, there are now 100 executives, managers, and supervisors who were once lean facilitators. From this experience we have learned that when management is deeply entrenched in lean thinking, the culture moves quicker in the right direction.

Everyone on the team should be full-time, with no other duties. It is my experience that other duties will always trump improvement efforts, if allowed. In addition, potential leaders from throughout the organization, including support services such as finance and human resources, should be encouraged to seek positions on the central improvement team. All parts of the organization will be using the same operating system, after all, so it is important that everyone uses the same language and has the same goals.

This is also your opportunity to unify all improvement efforts. Most health systems have one or two—or a half-dozen—improvement efforts under way. Maybe a couple of people are still working through a GE 90-day Workout, while one division is trying for a Baldrige National Quality Award and another division is invested heavily in Six Sigma.

All of these efforts must now come under the central improvement team office.

This can be done respectfully, with certain aspects of other programs being incorporated into lean healthcare. But the leader who leaves orphan improvement programs out there to slowly die by neglect risks a tide of resentment from people who put real effort into those now-sidelined programs. The leaders of your central improvement team should recognize the commonalities between lean healthcare and other initiatives by focusing on the principles from the previous chapter and then make a plan for creating a unified effort.

Your organization may also need to more clearly define roles and duties in some support services. The quality department will likely still need to collect and report data to the government or various agencies, and it may make sense to retain clinical improvement training in this department. This department will coordinate closely with the central improvement team, however, as all the principles and tools will be standardized under the one central improvement office.

How big the central improvement team should be and how its members should learn lean thinking are matters of some debate. My experience is that 1% of FTEs on the team is sufficient. Slip too far below this number and you run the risk of a marginalized lean team with sluggish circulation.

When the ThedaCare Improvement System was just getting started with our lean office, I picked out 12 of our best people and called each one to offer the job. They came from frontline management, from various improvement roles, and from the front line of care. We were about to radically change ThedaCare, I told each one, and I wanted him or her to help me lead the charge. I promised support and that good opportunities would await them on the other side. The senior VP of quality

and human resources led the team and directly reported to me so that everyone understood the CEO was taking a personal interest. Every one of my recruits agreed to join.[40]

So, I had my team. But how were we going to get them ready to lead large and small improvement projects, to create value-stream maps and 3P laboratories? Here is another fork in the road with two valid paths to take. Let's call the paths Training Wheels and Inside Expert.

The Training Wheels approach involves finding the right lean consulting group that can train your team while leading rapid-improvement events. This is what I chose to do at ThedaCare. Outside consultants were out at gemba every week for the first six years, training and leading different kinds of projects. As the lean team's skills increased, members became mentors and taught lean skills throughout the organization.

When frontline consultants are no longer needed, the training wheels come off. Many organizations retain an external sensei for years after to help leaders see hidden issues. But it is important that everyone knows from the beginning—and prepares for the day—that your organization will own this work.

Helen Macfie has a classic example of this method in action, with a couple of interesting twists. Now the chief transformation officer of MemorialCare in Southern California, Macfie was the vice president of performance improvement in 2006 when she helped lead MemorialCare's six-hospital system down a lean path. They did not call it "lean" at first because they feared it would sound too much like the next big cost-cutting initiative, she says, but they were introduced to lean thinking by some of the masters: Seattle Children's Hospital, Virginia Mason Medical Center, and Boeing.

40. Over time, the office grew to a maximum of 36 people—about 1% of ThedaCare's FTEs—and then dropped back down to a lower number. As more fully trained lean experts rotated out of the office and into leadership roles, we needed fewer facilitators.

Macfie knew she needed help to get started, so she began interviewing consulting firms. She and her team listened to consultants describe their training methods and their recommendations on where and how to begin. They knew they had found the right match when a Washington State consultant group talked about time horizons.

"Their idea was that they would be with us for about five years and then we would get a friendly divorce," Macfie says. "That made sense to us since consulting is so expensive and we really wanted to grow our own expertise and capacity."

Their journey began cautiously. That first year they did 17 improvement events, which they called proof-of-concept tests, primarily at the 313-bed acute-care Saddleback Memorial Medical Center in Laguna Hills. Macfie, along with her "partner in crime" Tamra Kaplan, created a central improvement office with just two other interested people and a part-time secretary to keep them organized.

As they gained confidence, they moved into other facilities and began differentiating projects. Rapid Process Improvements and 5S[41] were four- or five-day team events where the results were expected to be implemented on the following Monday. Rapid Process Design events were "for the more gnarly road-map projects." The team initially looked for big-impact improvements that would help tell the story of lean. One event at Long Beach Memorial Medical Center and Miller Women's and Children's Hospital, for instance, helped them avoid the $750,000 cost of a fourth digital mammography machine yet moved patients through the process quicker and cut down on wait time. A lot of people in the organization learned about lean thinking by touring the mammography unit at the Friday report-out and hearing that story.

41. Popularized by the Toyota Production System and based on five Japanese words that begin with "s," 5S focuses on cleaning, organizing, and standardizing the workplace. The five Ss can be translated into English as sort, separate, shine, standardize, and sustain.

During year two of the journey, they did 47 events, and by year three, they were doing 80–100 events per year and were looking for additional improvement facilitators, whom they call "lean fellows," for their newly christened Lean Resource Office. Macfie and Kaplan created criteria for the job of fellow, developed a list of names, and asked the chief operating officers of the various hospitals and divisions for input. It was not always perfect.

In the beginning, new fellows were asked for two-year commitments and spent their first 18 months in training. It was an intensive program, testing a fellow's analytical and leadership skills and his or her ability to rapidly assimilate new information and facilitate projects through to completion. Not everyone was able to finish the training, and it was difficult, though absolutely necessary, to integrate those people who did not make the level of fellow back into their old job or another without a loss of status or respect. Also, fellows who completed training and left after two years gave back little time to the lean office. Most fellows came back to the lean team for short periods each year to stay current on techniques and lean facilitation skills and to lead teams. Still, the training-to-facilitating ratio was out of balance.

As Macfie's friendly divorce from the original consultants approached in year 5, she and her team took over and streamlined the lean fellow training into a 12-month program, followed by 12 months of full-time facilitation. They created additional training for the advanced position of master fellow and became more skilled at assessing potential fellows.

Some people who join the lean office are lifers, Macfie says. They are dedicated, love the energy, and do not mind the sometimes-long hours and hard work. But most fellows end up staying with the office for about five years. Those who go back into nursing or pharmacy or other sections return at a higher level and bring lean thinking into their new jobs. Tamra Kaplan, for instance, was promoted to COO for Long

Beach Memorial after three years running the Lean Resource Office and was succeeded by Brian Stuckman, now VP for materials and lean resources, and Lorra Browne, master fellow and director of the Lean Resource Office.

Seven years into their lean journey, MemorialCare had a lean office consisting of 10 fellows, three data analysts, and an office coordinator, with plans for new hires to staff the transformation at newly acquired organizations. To expand capacity in the facilitator ranks, they also created tracks for an additional six fellows who remain in their frontline jobs and may rotate through the Lean Resource Office only occasionally. These are called embedded fellows. To grow expertise of line managers and leadership, they developed a four-day lean management training program that includes mandatory completion of a project. That program has graduated more than 400 managers so far, including many physicians. Of those, about 80 have gone on to a higher "certified lean leader" level where they can co-lead workshops, run events and A3s, provide coaching, and serve as role models.

"We had to make sure that managers knew more than their people about running improvement projects," Macfie says, "so they can foster the work of the event teams, introduce daily management, and strengthen their coaching skills for the long haul."

With 11,700 employees in the MemorialCare system, the Lean Resource Office is still well shy of the 1% mark. However, Macfie says they are continuing on with steady growth as the system grows and continuing to train managers, lean leaders, and embedded fellows.

"For us, a lesson learned has been that having a planned divorce was really good. Tensions will naturally grow between consultants and clients as you evolve your own lean expertise and style, and it was good to have that plan in place and to be ready to make the leap on our own," Macfie says.

"Now, at the eight-year mark, MemorialCare has logged $62 million in savings documented through lean, and it has really become our way of life—truly a management system."

Along the way, MemorialCare system leaders also learned to stop measuring every dollar spent and saved in lean projects.

This is a contentious issue in the majority of lean transformations I have witnessed. Some faction of senior managers usually wants return on investment (ROI) strictly measured. At the beginning of a lean transformation, people see the bill for consulting services and the cost of creating and staffing the central improvement team, and they worry. For the first two and a half years of ThedaCare's lean transformation, I needed to track all money spent on consulting and apply it against any increased revenue or savings from improvement work.

Helen Macfie had the same issue. Leadership did not want to add any additional expenses to the 10-year budget and insisted that Macfie prove that the lean initiative was, at the very least, cost neutral. "In those first three or four years, we spent quite a bit of time—too much time—trying to collect and record the information on all those dollars hiding inside departmental spreadsheets all over the organization," Macfie says. "We would add up the expense of consultants, of taking people off their regular work to be on the improvement team, and match that up against the redeployed FTEs and the improvements that generated more revenue.

"In year four, I really started to see this wasn't healthy. People were working hard and making huge improvements and then fighting at the end of a project to justify it with dollars," Macfie says.

Macfie and I then essentially did the same thing: set up meetings with our CFOs, showed that lean improvements had sent tens of millions of dollars to the bottom line—even after the costs of consulting, travel, and

training—and asked to please stop this wasteful measuring. Fortunately, we both had forward-thinking CFOs, and the ROI calculations for every event ceased.

I now strongly recommend that organizations resist the urge to measure ROI from the beginning. Not only is it wasteful but also it signals to people that lean is a cost-savings initiative, which is absolutely wrong. Lean is a cultural transformation. It does not work unless quality, staff morale, and cost improve together. To have people measure ROI for every improvement project overly emphasizes the cost part of the equation.

Once a year now, Macfie is asked for the improvement system numbers for the annual report. Using a simpler accounting that does not mine the minutiae of every event, she can say that after eight years, their lean improvement work has sent $62 million to MemorialCare's bottom line. Still, if it were up to her, we would be talking about something else entirely: lives saved, better service in the EDs, happier staff.

If you do need to show ROI, make sure that you equally emphasize the other critical metrics. While planning and building the model cell, come to agreement on what will be measured and how in order to reflect the truth of changes to quality, staff morale, and cost. Cost is important, but it is only one aspect of lean.

Because every lean transformation will take on a different form, let's now go to HealthEast in St. Paul, Minnesota and see the Inside Expert approach to building a central improvement team.

As the new CEO, and formerly the president of hospitals at ThedaCare during its transformation, Kathryn Correia arrived in Minnesota in 2012 knowing that she would build a lean infrastructure at HealthEast. It was a big job. Kathryn had an entire health system to woo over. As an

experienced lean leader, she knew how profound the change to a lean operating system would be. She needed everyone in the same boat.

Early on, Kathryn and a small leadership team met with consulting groups that could provide the Training Wheels approach. In those meetings, however, she knew she was hearing consultants describe a more tools-only approach instead of a system-wide cultural transformation. Another consulting group, one with a system-wide approach, seemed too brash for HealthEast. Physicians and leaders with HealthEast had a long history of taking pride in their quality scores while downplaying some serious financial hurdles, and Kathryn knew that criticism from outsiders could create distrust.

So, Kathryn and her team kept looking and stumbled on the road less taken, which might be called Inside Expert. Here, you hire one very experienced lean leader to lead and train the central improvement team and to coordinate all improvement efforts from the inside. I do not recommend this path unless the CEO has some depth of experience with lean and knows what questions to ask of a potential Inside Expert. As Kathryn, my friend and former ThedaCare colleague, will confirm, the leader has to know what she does not know before taking this path.

As president of the ThedaCare hospitals division, Kathryn had been immersed in lean for eight years before she was lured to neighboring Minnesota to become CEO of HealthEast. With four hospitals, multiple clinics, and about $1 billion in annual revenue, HealthEast is comparable in size to ThedaCare. Kathryn knew the health system needed lean thinking, but she was also sensitive to being the new leader in an established system with its own culture.

"Coming to a new place is like going on that cooking show *Chopped*, where you get a basket of really different ingredients and you have to

make something of it," Kathryn says. "The trick is to highlight the best ingredient you've got."

Being a lean thinker, Kathryn chose to highlight a couple of big improvement projects. But she also recognized that these projects were completed largely with heroic actions outside normal ways of doing things. What she wanted was a culture of steady, sustainable continuous improvement throughout the organization.

"We needed a central improvement office. I knew it wasn't my job to build this office, but I needed the skill set to stay close with me," she says.

Quickly, Kathryn identified two change leaders in the organization: Cara Hull, an engineer, and Julie Schmidt, the chief administrative officer who was close to retirement but still strongly interested in improvement. Together, they took a senior team on a few field trips to see what good looked like. One day, they found themselves at Andersen Windows, where Cara Hull had contacts.

"And here we got lucky because we got to walk around with [plant manager] Didier Rabino, watching him walk through his morning management work. Now, I had been working with the daily management system at ThedaCare before I left, so I knew what he was doing, but I was watching his version," Kathryn says. "We saw how information flowed from the front line to the area coordinator up to Didier, and it was elegant. The escalation process [of problems] was transparent. Everything was just powerful yet understated."

Equally as important, Kathryn said, the environment was respectful. While they were watching, an employee had a problem picking material from a bin. The worker stopped the line, and an area coordinator and manager came to the area and, as a group, used PDSA thinking to come up with a corrective action plan. Nobody was afraid to talk about

problems. "You can't fake that stuff," Kathryn says. "This was the culture we wanted."

Driving back home from the plant, Kathryn said, "Wouldn't it be nice to have a consultant like Didier?" Schmidt replied, "Why don't we ask him?"

While Rabino had no background in healthcare, Kathryn saw a leader who would pay attention to the culture and to every detail of a process and who created an atmosphere of respect. It is a unique combination of skills and personality.

Having one sensei create a central improvement office and launch a lean operating system is full of hazards. Kathryn knew to avoid mistakes such as bombarding the organization with unconnected rapid-improvement events or allowing people to become complacent after snacking on low-hanging fruit. So she listened carefully as Rabino described the journey that he believed an organization should make. Knowing that a cultural transformation was her real aim, Kathryn was intrigued with Rabino's plans to begin change both bottom up and top down.

Rather than beginning lean work with rapid-improvement events at the front line, Rabino began with aspects of a daily improvement system—involving managers and staff in addressing problems with PDSA thinking—and with strategy deployment at the executive level.

"Within nine months, everyone had a visual management board, and leaders were conducting daily huddles. They were using PDSA and idea cards for improvement," Kathryn says. "Didier's approach was to go broad with everyone learning PDSA thinking. Only now [two years later] do we have a model cell.

"At the same time, he had us starting strategy deployment. We meet once a week now around strategy deployment, and Didier coaches us,

but he also has facilitators rotate through the position in our meetings so everyone knows strategy deployment."

Some of Rabino's ideas were unusual, but Kathryn was willing to take a chance. After all, this was Rabino's third time introducing a lean system to an organization. A former cabinetmaker turned engineer and production manager, Rabino studied with many lean masters while at Steelcase in England and France before moving to the United States.

Beginning in 1999, Rabino worked with David Mann[42] to create a lean system at Steelcase in Michigan. In 2004, Rabino moved to building the lean system at Andersen Windows, including daily management systems, company-wide training, and strong central improvement offices. Both Steelcase and Andersen Windows became widely known for their robust lean cultures.

When it came time to create the central improvement office that Rabino would lead at HealthEast, he wanted to keep it very small—much smaller than the 1% of FTEs that Kathryn was expecting.

"We do not want a *do-it-for-me* model," Rabino explains with the French accent of his native land. "This is disrespectful, because it takes away opportunities for a leader to learn.

"If I keep my capacity [in the lean office] small, when a leader calls me up and asks for someone who will do a project for him, I can say, 'No, I can't do that.' Then, I can teach this leader how to do his own project. If I do it for him, we would have short-term results but deny that leader the chance to become a better leader."

Rabino's argument is certainly interesting and, in the end, he and Kathryn settled on a hybrid model, keeping fewer than 10 facilitators on the improvement team but moving them through—and up through—the

42. Author of *Creating a Lean Culture* (CRC Press: 2010)

organization fairly quickly. Rabino expects to train more facilitators who will stay embedded in their own areas. Meanwhile, he is focused on giving intensive workshops in skill development such as leading projects with A3.

With such a small central improvement office, Rabino has been very careful about whom he selects for these critical roles, and he has some advice. "When I look at résumés, my red flags are ISO 9000 and Six Sigma, because ISO is focused on compliance not improvement and Six Sigma trains people to work alone for long stretches of time, instead of developing people. This does not mean that these people are bad, only that they might need to relearn. Lean requires people who are curious, driven by the need to learn. We need teachers and coaches who are capable of discipline and resilience and, most of all, who have the capacity to listen. Humility is not on the résumé, but that is what we need."

Taking the Inside Expert path is less common in healthcare, but HealthEast is seeing results comparable to those taking the Training Wheels approach. Along with a greater emphasis on standard work and scientific thinking, the revenue/cost margin at this nonprofit system has never been higher. Historically below 2% and usually less, the margin has risen to 3%. Patient satisfaction scores are steadily rising, and an EPIC implementation, using lots of employee-generated idea cards and PDSA thinking in the preparatory stages, went far smoother than such things usually go. In 2014, HealthEast was proudly counting 29,400 improvement ideas implemented—meaning checked and verified—in a year.

"My one concern at the beginning was that Didier would leave before we were up and running," Kathryn says. "That didn't happen, and now I see that this rollout was absolutely the right decision for this organization."

At three organizations taking different paths to lean deployment, MemorialCare, ThedaCare, and HealthEast, we have seen three manifestations of the central improvement team with some very important commonalities that illustrate the essential framework. A central improvement team needs a dedicated full-time staff, with either a solid or dotted reporting line to the CEO, and must be used as a pipeline for developing future leaders. The central improvement team, where everyone receives and eventually spreads lean training, is the keeper of the flame. The other details, such as how many people are in the office and whether you select a Training Wheels or an Inside Expert approach, must be dictated by individual circumstances.

At HealthEast, the top-down, bottom-up plan worked in large part due to Rabino's reliance on a daily management system including huddle boards, visual management, and standard work for leaders. This was also critical in the lean deployment at ThedaCare and MemorialCare, too. So, it is time that we introduce the line management method work that becomes the central nervous system of a lean organization.